DOCUMENT RESUME

ED 286 636 PS 016 843

AUTHOR DeCooke, Peggy A.; Brownell, Celia A.
TITLE Toddler Help-Seeking as a Function of Age and Social Context.
PUB DATE Apr 87
NOTE 14p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (Baltimore, MD, April 23-26, 1987).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Infant Behavior; *Infants; Mothers; Personality; Play; Problem Solving; Sex Differences; Social Environment
IDENTIFIERS *Help Seeking

ABSTRACT

The purpose of this study was to investigate the alternative forms of young children's help-seeking in free play and problem-solving contexts. A total of 72 children aged 18 (N=36) and 24 (N=36) months were observed in pairs in free play and problem-solving settings, as well as in different social contexts--same-age versus mixed-age pairing. Both mothers and an adult female experimenter were present with the children. Mothers also completed the Attachment Q-Sort and the Toddler Temperament Scale. Results indicate that by 18 months of age children engage in explicit, goal-specific help-seeking when confronted with a challenging problem. Girls sought more help on the toys that presented motoric challenges, while boys sought more help on the toys that presented conceptual challenges. Rate of help-seeking increased in problem-solving contexts relative to free play contexts for both ages; however, 18-month-olds relied on gestures, whereas 24-month-olds were able to verbally communicate their needs. There were no differences in help-seeking behavior when social context was changed, and few relations emerged between help-seeking and temperament. (PCB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED286636

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

TODDLER HELP-SEEKING AS A FUNCTION OF AGE & SOCIAL CONTEXT

Peggy A. DeCooke & Celia A. Brownell

University of Pittsburgh

PS 016843

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Celia A. Brownell
Peggy A. DeCooke
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

Paper presented at the meeting of the Society for Research in Child Development, Baltimore, MD, April, 1987.

BEST COPY AVAILABLE

Introduction

Help-seeking is an important social problem-solving strategy in children (Nelson-Le Gall, 1985), yet its origins and early development are largely unknown. Studies of the onset of intentional communication (e.g., Bates et al., 1975) have used early forms of help-seeking as an index of intentionality, and studies of attachment have included help-seeking as an index of social competence. However, no research has examined help-seeking qua help-seeking in toddlers. Help-seeking is comprised of several component social/social-cognitive skills, including awareness and representation of one's goal directed activities and capabilities, awareness that skilled others may assist in goal attainment, and communicative abilities. Hence, its origins would be expected to lie in the second year, when profound changes in the child's representational abilities occur (e.g., Mandler, 1983), as well as increasing self/other differentiation (Piaget, 1954), and accompanying social/social-cognitive developments (Brownell, 1986).

During the latter half of the second year, many children begin to exhibit a desire to be instrumentally effective, as shown in their improved performance on tasks set by adults, as well as in their attempts to master more challenging tasks on their own. Young children become increasingly sensitive to standards set by adults and their ability to meet goals, both self- and other-generated, based on these standards (Kagan, 1981). That young children have representations of these goals is evidenced by mastery smiles when goals are achieved and by distress or avoidance when tasks appear too difficult to accomplish alone. Hence, children have begun to exhibit self-awareness, particularly awareness of their abilities and competencies in relation to a particular goal (Kagan, 1981).

Because young children are relatively inexperienced in a wide variety of cognitive and social domains, however, they may be likely to encounter difficulty in attaining their goals. One option that children have when they experience task difficulty is to request assistance from more competent others. In older children (e.g., elementary school children), seeking help from more competent others has been conceptualized as a problem-solving strategy that allows children to remain involved with difficult tasks and that enhances opportunities for learning (Nelson-Le Gall, 1981; 1985). Children's instrumental help-seeking, especially that of young children, has received little attention from researchers. In most cases, help-seeking has not been defined as a mastery-oriented behavior in young children, but as a component behavior in early cooperative interchanges (Eckerman et al., 1975; Hay, 1979; Rheingold & Hay, 1978), sharing (Rheingold et al., 1976), or altruistic helping (Eisenberg-Berg & Hand, 1979; Yarrow, Waxler, et al., 1976).

Several studies have demonstrated that young children can exhibit cooperative and helping behaviors in structured situations. Rheingold (1982) simulated common household tasks in the laboratory and found that children aged 18-30 months were willing to spontaneously help their parents with these tasks. In addition, toddlers will work with one another to achieve a construction, as in alternatingly placing blocks in a tower formation (Bronson, 1981; Eckerman & Stein, 1981; Eckerman et al., 1975), or in solving cooperative problems (Brownell, 1982). It may be that these early prosocial and cooperative behaviors are precursors to more mature forms of helping, but help-seeking as a problem-solving strategy remains virtually unexplored in the very young child. Given the importance of help-seeking as an effective problem-solving strategy during the school years as well as its importance to the immediate mastery of the environment, it is important to identify the forms that early help-seeking might take.

The purpose of the present study was to investigate the alternative forms of young children's help-seeking in free play and problem-solving contexts. Several questions were addressed: 1) are there age differences in toddler's ability to discriminate problem-solving situations that afford help-seeking? 2) what forms does early help-seeking take, and how does it change over the second year? 3) can the young child discriminate appropriate helpers and, in particular, are peers of different ages considered appropriate/inappropriate as helpers? 4) is help-seeking subject to influence by individual differences, such as the child's temperament?

To address these questions, children were observed in pairs in free play and problem-solving settings. Dyads experienced different social contexts - same-age vs. mixed-age pairings. Both mothers and an adult female experimenter were present with the children, permitting four possible targets of help-seeking for each child.

Methods

The subjects for this study were 36 18 month-old and 36 24 month-old toddlers and their mothers. Equal numbers of males and females were included at each age. The children were assigned to same-age dyads, composed of two 18 month-olds or two 24 month-olds, or to mixed-age dyads, composed of an 18 month-old and a 24 month-old.

Each dyad and their mothers met for a play session in an attractive laboratory playroom, furnished with age-appropriate toys. All interactions during the session were videotaped. Following a 15 minute free play session, toddlers were presented with four problem-solving toys/tasks of increasing conceptual or motoric difficulty (see Appendix A). Each toy was presented for approximately seven minutes. Mothers were instructed to let their children work on the problems independently, but to respond to any bids for help that the children made. Mothers completed the Attachment Q-Sort (Waters & Deane, 1985) and the Toddler Temperament Scale (Fullard, McDevitt, & Carey, 1978).

Results

Analyses were conducted on rates of help-seeking using 2 (sex) x 2 (age) x 2 (dyad composition) x 2 (toy condition) x 4 (help-seeking style) Anovas. Dyad composition was either same-age or mixed-age. Toy conditions were free play and problem-solving. Help-seeking styles were vocal, direct gestural, indirect gestural, and imitation (see Appendix A). The first three factors were between subjects and the latter two were within subjects. Help-seeking rates were adjusted for time in each condition. All reported contrasts were significant at $p < 0.05$.

1. Age: 18 months vs. 24 months

No age effects; overall, younger and older children engaged in equivalent amounts of help-seeking.

2. Dyad Composition: Same-age vs. Mixed-age

No main effects for dyad composition. Children in same-age and mixed-age dyads engaged in equivalent amounts of help-seeking.

3. Problem-Solving Toys: Individual-Easy vs. Individual-Difficult vs. Manipulation (Individual; Cooperative)

a. Individual-difficult toy elicited the most help-seeking.

b. Individual-difficult toy elicited more vocal help-seeking and more imitation than did the individual-easy toy; No differences for gestural help-seeking.

c. Cooperative manipulation toy elicited more vocal help-seeking, less imitation, and more direct gestural help-seeking than did its individual analog.

4. Motorically vs. Conceptually Difficult Toys

Females engaged in more help-seeking on motorically difficult toys, whereas males sought help more often on conceptually difficult toys.

5. Toy Condition: Free Play vs. Problem-solving

a. More help-seeking occurred in the problem-solving setting than in the free play setting.

b. Qualified by an interaction with age: 24 month-olds, but not 18 month-olds, exhibited more help-seeking in the problem-solving condition relative to the free play condition (SEE FIGURE 1).

6. Help-Seeking Style: Vocal; Gestural (Direct; Indirect); Imitation

a. Vocal help-seeking was most frequent, followed by direct gestural and imitation, and then by indirect gestural.

b. Qualified by an interaction with age: 24 month-olds engaged in more vocal help-seeking than did 18 month-olds, and vocal help-seeking was the most preferred style for the 24 month-olds; 18 month-olds, on the other hand, engaged in more direct gestural help-seeking and imitation than did 24 month-olds, although the younger children also used vocal help-seeking (SEE FIGURE 2).

7. Age x Toy Condition x Help-Seeking Style

24 month-olds used markedly higher rates of vocal help-seeking and showed more modest increases in gestural styles of help-seeking in the problem-solving condition relative to the free play condition; 18 month-olds exhibited higher rates of direct gestural help-seeking and only a modest increase in vocal help-seeking, along with lowered rates of imitation in the problem-solving condition as compared to the free play condition (SEE FIGURE 3).

8. Help-Seeking Related to Temperament

Adaptability and mood correlated negatively with total rate of help-seeking (-.33; -.26) and positively with latency to seek help (.33; .24), i.e., less adaptable children and children

characterized by more negative mood engaged in help-seeking less often and took longer to initiate their requests.

Discussion

These data argue that by 18 months children engage in explicit, goal-specific help-seeking when confronted with challenging problems. Indeed, the toys determined a priori to be the most difficult elicited the greatest amounts of help-seeking from both 18 and 24 month olds. An interesting sex difference emerged for the motorically and conceptually difficult toys. Across both ages, girls sought more help on the motorically difficult toy whereas boys did so on the conceptually difficult toy. It is not clear what to make of this sex difference in the absence of a pretest of motor and conceptual abilities. Nor, as far as we know, do the literatures on sex differences and socialization suggest early socialization differences along these lines.

Eighteen month olds' rate of help-seeking did not differ between the free play and problem-solving conditions, whereas the 24 month olds' did. This might suggest that only the older children were able to discriminate situations that posed cognitive difficulties and to adopt strategies to surmount them. However, a more detailed look at several aspects of help-seeking style clarified the underlying patterns, and proved this interpretation incorrect. Specifically, 18 month olds did increase their direct gestural help-seeking in the problem-solving condition relative to the free play condition, while 24 month olds increased their rates of vocal help-seeking. This pattern points to a couple of conclusions. First, even 18 month olds are capable of adopting task-related goals and of monitoring and evaluating their performance and abilities in relation to these goals. Second, help-seeking style changes over the second year in conjunction with developing symbolic skills. The 24 month olds were able to communicate their difficulties and their needs over a distance by using verbalizations. The 18 month olds, on the other hand, were forced to depend on direct, physical gestures or actions on the potential helper to communicate the same information.

It should be noted that indirect gestural help-seeking was relatively rare, even in the younger group. This form of appeal - looking back and forth between the troublesome task and the adult, while manipulating the apparatus - is considered by some (e.g., Bates et al., 1975; Feagans et al., 1984) to be the hallmark of intentional communication in still younger children. But indirect gestural help-seeking is not specific to either the child's particular difficulties with respect to the intended goal, or to the helper's particular role in mediating the problem. Hence, indirect gestural help-seeking does not imply the sophistication of social knowledge entailed in direct gestural and vocal help-seeking. It may, however, be considered perhaps the earliest form of intentional attempts to influence another's behavior on one's own behalf.

A second distinctive pattern in help-seeking emerged for imitation. Specifically, while 18 month olds imitated each other during free play more often than did the 24 month olds, the reverse was true in the problem-solving setting. Although this study did not explicitly examine problem-solving strategies, imitation can be considered a problem-solving strategy as well as an instrumental help-seeking strategy. In that light, what this pattern of results suggests, then, is that the 18 month olds were using imitation primarily in the service of social play, abandoning it during problem solving, while the 24 month olds were able to use imitation adaptively, subsuming it to a cognitive goal, i.e., as a strategy for enhancing their own goal-related outcomes.

Together, these findings illustrate the emergence during the second year of some important social-cognitive skills. Most broadly, perhaps, young children's explicit, goal-directed help-seeking must be premised on the achievement of self-awareness (e.g., Kagan, 1981) and self-regulation and control (e.g., Kopp, 1982; Vaughn et al., 1984). In particular, it is indicative of the more specific ability to monitor one's own performance and ability relative to an externally imposed goal or outcome. The child's performance is motivated by a goal established by someone other than the child herself. She must be able to represent that goal as well as her own attempts to achieve it. Moreover, she must be able to evaluate her performance in terms of its success or failure to achieve the goal, and to plan alternative strategies, such as help-seeking, when she has judged her attempts unsuccessful. All of this suggests a quite sophisticated representation of the self. Finally, the young child's ability to make strategic, instrumental use of social resources to assist in achieving goals illustrates awareness not only of one's own agency (i.e., the ability to effect outcomes intentionally and autonomously) but awareness of other's agency as well. Existing research has shown that the latter understanding emerges between 18 and 24 months (cf., Fein et al., 1984). The present research confirms the existence of this global understanding that others can act as independent agents, and it further indicates that the very young child understands precisely what the other is capable of, i.e., when and where the other might appropriately exercise his agency to be of assistance. Hence, although this research did not set out to index directly those specific aspects of social-cognitive development, the results illustrate them nonetheless.

The manipulation of social context proved unproductive. This is probably not surprising, given that nearly all help-seeking was directed to the adult experimenter, and there was no reason to expect adult-directed help-seeking to vary in same-age vs. mixed-age groups of children. It is possible that the children's preference for an adult as a helper was based on their understanding of the adult's greater competence relative to peers. It is also possible, however, that peer interactions are still too infrequent at this age to be able to detect significant or reliable help-seeking from one another.

On the whole, few relations emerged between help-seeking and temperament. Temperament style did not predict help-seeking style, but total help-seeking and latency to seek help related to two different aspects of temperament. Children perceived as less adaptable and as more negative in mood sought less help and took longer to initiate requests when they did need help. Although one must be cautious in interpreting correlations, particularly when they are generated from a larger pool of potential relations, the particular pattern found here may warrant further exploration. If instrumental help-seeking is conceptualized as an important problem-solving strategy (e.g., Nelson-Le Gall, 1985), such children may be underutilizing these resources during problem-solving. Alternatively, perhaps these children are less task-involved or less goal-directed, and hence, less likely to seek help. These are intriguing possibilities, particularly if temperament is suspected to affect multiple dimensions of functioning (Coll et al., 1984). Future research may address such possibilities more directly.

Appendix A

Description of Problem-Solving Tasks/Toys

1. Individual-Easy: Keys of Learning - child's task is to fit colored blocks into different shaped nests and then turn a key to release them.

2. Individual Manipulation-Retrieval Task - child's task is to depress a lever that raises a cup filled with small attractive animals to an opening in a box. The toys can then be removed from the box.

3. Cooperative Manipulation-Retrieval Task - a cooperative version of the preceding toy that requires the child to request additional assistance to remove the toys (e.g., it cannot be solved independently). A plexi-glass barrier stretches across the toy, preventing the child from retrieving the toys while pushing the lever.

4. Individual-Difficult: Form Fitter Task - a motorically difficult task requiring the child to fit plastic forms to a wheel in order to form a ball. OR Buzzer-Key Task - a conceptually difficult toy requiring children to depress two buttons simultaneously to turn on play centers and ring a bell concealed within the toy.

Help-Seeking Style Coding Variables

Vocal Requests - the child verbalizes a need for help. In older children, these requests often took the form of specific task-related comments. For younger children, questioning verbalizations were accompanied by looks to the helper, and by pointing to specific areas of the toy or by bringing the toy to the helper.

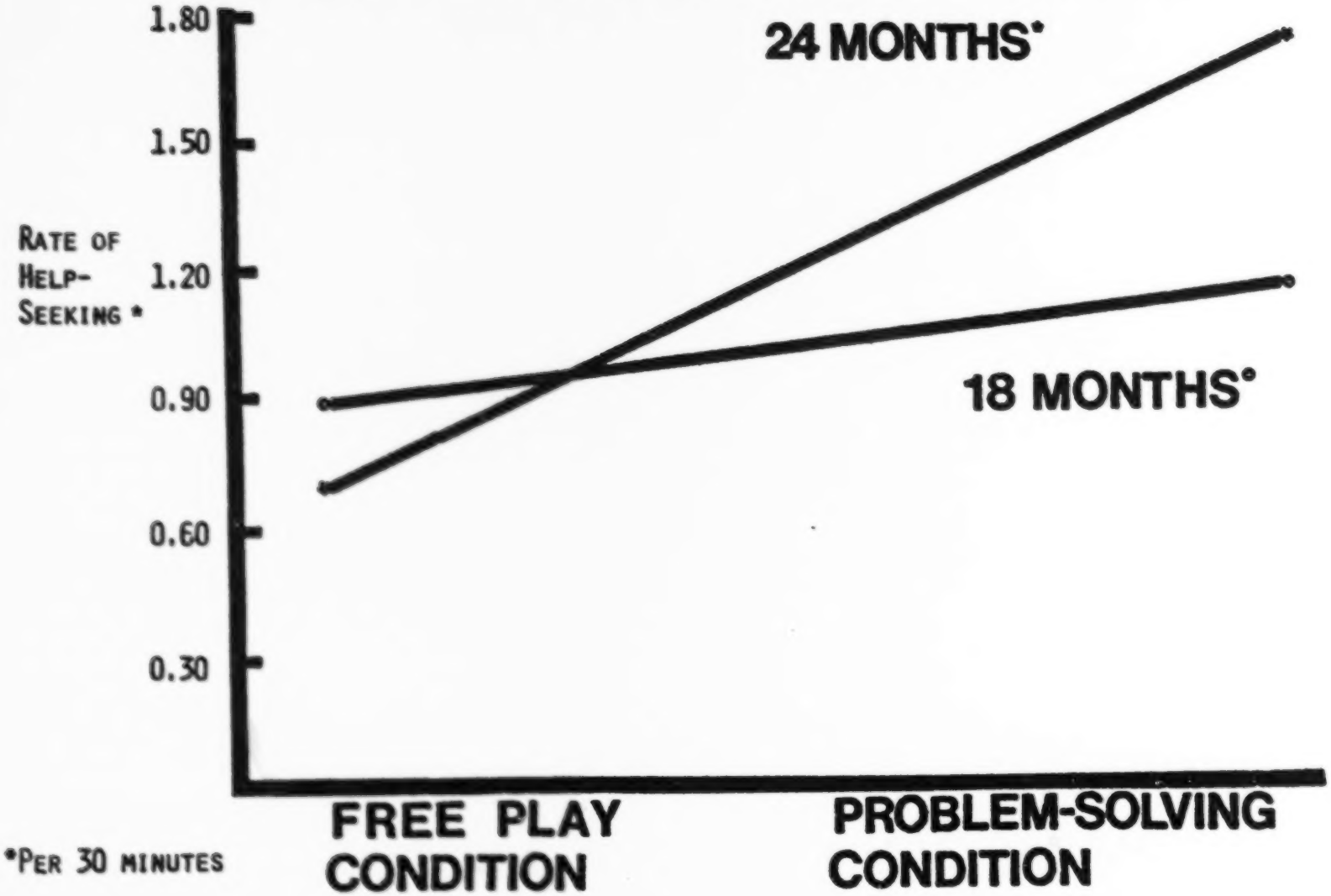
Direct Gestural Requests - the child uses part of the helper's body to assist in attaining a goal, e.g., taking the helper's finger and pushing it down on a button that was too difficult to push alone.

Indirect Gestural Requests - gestural behaviors directed to the toy itself, such as making pushing motions on a lever, and accompanied by alternating looks to the toy and to the helper.

Imitation - imitation of the peer's or an adult's problem-related actions within 5 seconds of the actor's actions.

FIGURE 1

RATE OF HELP-SEEKING AS A FUNCTION OF AGE AND TOY CONDITION



*PER 30 MINUTES

FIGURE 2

RATE OF HELP-SEEKING AS A FUNCTION OF AGE AND HELP-SEEKING STYLE

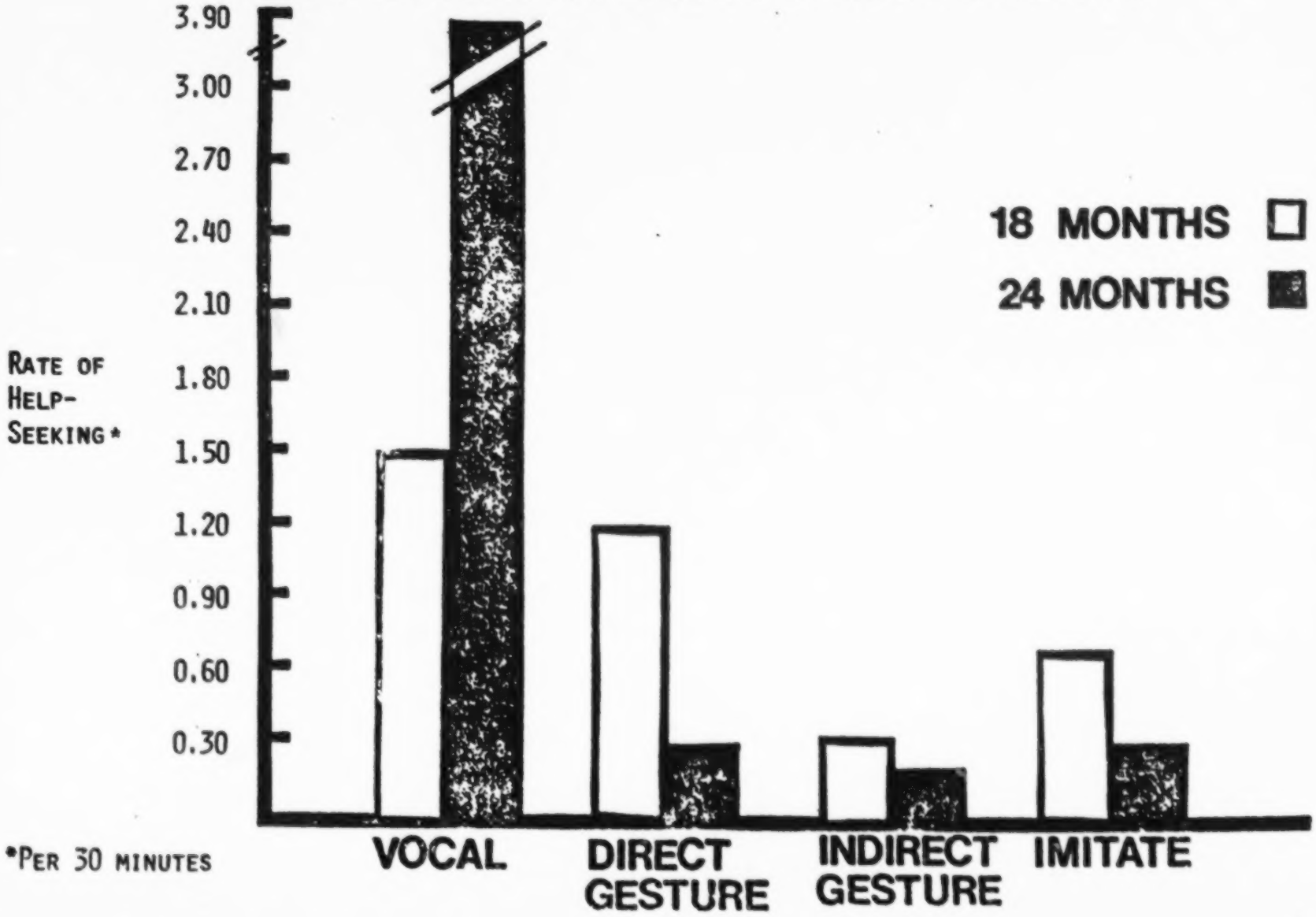


FIGURE 3
RATE OF HELP-SEEKING AS A FUNCTION OF AGE, TOY CONDITION, AND HELP-SEEKING STYLE